

IN THE CLAIMS

Please amend the claims as follows. Presented below is a complete listing of claims in the revised format showing markings as set forth by the U.S. Patent and Trademark Office on January 31, 2003.

1. (Currently Amended) A method of using a storage module in a device, the device communicating with a server, comprising:

sending a request for a data download to a server;

receiving response data in response to a the request sent by the device;

identifying an automatically substituted code in the response data, the automatically substituted code inserted into the data by the server to reduce a size of the response data;

replacing the code in the response data with corresponding terms data associated with the code from in the storage module in the device, prior to displaying the data on the device.

2. (Original) The method of claim 1, further comprising:  
periodically updating data in the storage module.

3. (Currently Amended) The method of claim 1, further comprising:  
~~periodically replacing enabling periodic replacement of the storage module in the device to contain an often-used set of terms.~~

4. (Original) The method of claim 1, wherein a term may comprise one or more of the following: a word, a phrase, a graphic element, an image, graphic animation sequence, video clip, sound clip, applet, or a binary large object (BLOB).

5. (Original) The method of claim 1, further comprising:  
storing a plurality of code-term pairs in the storage module; and

inserting the storage module into the device.

6. (Original) The method of claim 1, wherein the data is received in the device over a low bandwidth wireless connection.

7. (Original) The method of claim 1, wherein the storage module is a device selected from among the following: a Flash memory, a Click disk, an EEPROM, a magnetic storage device, an IBM MicroDrive, and an optical storage device.

8. (Original) The method of claim 1, further comprising:  
gathering statistics about a frequency of occurrence of each code in the storage module.

9. (Original) The method of claim 8, further comprising:  
transmitting the statistics to a central mechanism for updating contents of the storage module.

10. (Currently Amended) A service provider for providing data to a device via a low bandwidth connection, the service provider comprising:

a database including a plurality of codes and associated terms, the codes and terms corresponding to codes and terms in a storage module in the device;

an analysis logic to receive a request for data from the device

a formatting logic to retrieve ~~the~~ response data in response to a the request from the device;

a substitution logic to automatically replace a term in the response data with a code, the automatically substituted code reducing a size of the response data; and

a transmission logic to transmit the response data including the code to the device, such that the device is capable of replacing the code with the original term prior to displaying the data to the user.

11. (Original) The service provider of claim 10, further comprising:  
a statistic gathering logic to gather statistics about a frequency of occurrence of each terms in the data.
12. (Original) The service provider of claim 11, further comprising:  
an analyzing logic to analyze statistics and determine a set of useful terms for inclusion in the database.
13. (Original) The service provider of claim 12, further comprising:  
a storage module updating unit to generate an updated data set for the database and for a storage module.
14. (Original) The service provider of claim 10, wherein the data in the database is periodically updated.
15. (Currently Amended) A portable device to receive data processed by a server, the server creating formatted data from original data, the device comprising:  
a low bandwidth connection to a network to receive formatted ~~Web content~~ data including one or more codes from a server in response to a request;  
a storage module including a plurality of codes and associated data elements;  
a substitution logic for detecting the codes in the formatted ~~data Web content~~ and substituting the associated data elements for each of the codes, to recreate the original data;  
such that the bandwidth of data transferred over the low bandwidth connection is reduced by transmitting the codes instead of the associated data elements.
16. (Original) The portable device of claim 15, wherein the low bandwidth connection is a wireless connection.
17. (Original) The portable device of claim 15, wherein the storage module is a built-in device.

18. (Original) The portable device of claim 15, wherein the storage module is a removable device.

19. (Original) The portable device of claim 18, wherein the storage module comprises a storage module selected from among the following: a Flash memory, a Klik! disk, an EEPROM, a magnetic storage device, an IBM MicroDrive, and an optical storage device.

20. (Original) The portable device of claim 15, further comprising a statistic collection logic for identifying which of the codes are used.

21. (Original) The portable device of claim 20, wherein the data in the storage module is updateable, such that based on the statistics collected by the statistics collection logic the contents of the storage module are periodically updated.

22. (Currently Amended) A system comprising:  
a first device having a low bandwidth connection to a network, the first device including a storage module to store a plurality of codes and associated data elements;  
a second device for preparing data for transmission to display on the first device;  
the second device including a copy of the data on the storage module including the plurality of codes and associated data elements, and  
the second device to automatically substitute a code for a replacing a data element sent to the prior to sending the data to the first device with a code, if the data element is in the storage module; whereby the bandwidth used for transmitting the data to the first device is reduced.

23. (Previously Presented) The method of claim 2, further comprising:  
updating the storage module using a higher bandwidth connection, the higher bandwidth connection selected from among the following: a wireless connection, a docking station based connection, an infrared connection, and a direct connection to a network.

24. (Previously Presented) The portable device of claim 21, wherein the storage module is updated using a higher bandwidth connection, the higher bandwidth connection selected from among the following: a wireless connection, a docking station based connection, an infrared connection, and a direct connection to a network.